

## ABSTRACT

An arrangement and method for imaging and/or measuring tissue qualities, such as tissue thickness, tissue surface roughness and degree of tissue fiber linearization. The arrangement includes at least one light generating element, at least one light detecting element, a probe with an extension, and possibly a control apparatus including a signal processor for processing the detected signals and/or images. The extension is designed to convey light from the light generating element to the tissue for visualization and/or measurement. The extension is also designed to convey light back-scattered from the tissue to the light detecting element. The detecting element is designed to measure the intensity and/or spatial distribution of light back-scattered from the tissue.